

Environmental Protection Agency

Pt. 98, Subpt. HH, Table HH-1

not considered part of the gas collection system as defined in §98.6) are present at the landfill.

(8) Methane generation corrected for oxidation calculated using Equation HH-5 of this subpart, reported in metric tons CH₄.

(9) Methane generation (G_{CH₄}) value used as an input to Equation HH-6 of this subpart. Specify whether the value is modeled (G_{CH₄} from HH-1 of this subpart) or measured (R from Equation HH-4 of this subpart).

(10) Methane generation corrected for oxidation calculated using Equation HH-7 of this subpart, reported in metric tons CH₄.

(11) Methane emissions calculated using Equation HH-6 of this subpart, reported in metric tons CH₄.

(12) Methane emissions calculated using Equation HH-8 of this subpart, reported in metric tons CH₄.

[74 FR 56374, Oct. 30, 2009, as amended at 75 FR 66472, Oct. 28, 2010]

§98.347 Records that must be retained.

In addition to the information required by §98.3(g), you must retain the calibration records for all monitoring equipment, including the method or manufacturer's specification used for calibration. You must retain records of all measurements made to determine tare weights and working capacities by vehicle/container type if these are used to determine the annual waste quantities.

[74 FR 56374, Oct. 30, 2009, as amended at 75 FR 66473, Oct. 28, 2010]

§98.348 Definitions.

Except as specified in this section, all terms used in this subpart have the same meaning given in the Clean Air Act and subpart A of this part.

Construction and demolition (C&D) waste landfill means a solid waste dis-

posal facility subject to the requirements of part 257, subparts A or B of this chapter that receives construction and demolition waste and does not receive hazardous waste (defined in §261.3 of this chapter) or industrial solid waste (defined in §258.2 of this chapter) or municipal solid waste (as defined in §98.6) other than residential lead-based paint waste. A C&D waste landfill typically receives any one or more of the following types of solid wastes: Roadwork material, excavated material, demolition waste, construction/renovation waste, and site clearance waste.

Destruction device means a flare, thermal oxidizer, boiler, turbine, internal combustion engine, or any other combustion unit used to destroy or oxidize methane contained in landfill gas.

Industrial waste landfill means any landfill other than a municipal solid waste landfill, a RCRA Subtitle C hazardous waste landfill, or a TSCA hazardous waste landfill, in which industrial solid waste, such as a RCRA Subtitle D wastes (nonhazardous industrial solid waste, defined in §257.2 of this chapter), commercial solid wastes, or conditionally exempt small quantity generator wastes, is placed. An industrial waste landfill includes all disposal areas at the facility.

Solid waste has the meaning established by the Administrator pursuant to the Solid Waste Disposal Act (42 U.S.C.A. 6901 *et seq.*).

Working capacity means the maximum volume or mass of waste that is actually placed in the landfill from an individual or representative type of container (such as a tank, truck, or roll-off bin) used to convey wastes to the landfill, taking into account that the container may not be able to be 100 percent filled and/or 100 percent emptied for each load.

[75 FR 66473, Oct. 28, 2010]

TABLE HH-1 TO SUBPART HH OF PART 98—EMISSIONS FACTORS, OXIDATION FACTORS AND METHODS

Factor	Default value	Units
DOC and k values—Bulk waste option		
DOC (bulk waste)	0.20	Weight fraction, wet basis.
k (precipitation plus recirculated leachate ^a <20 inches/year)	0.02	yr ⁻¹

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Factor	Default value	Units
k (precipitation plus recirculated leachate ^a 20–40 inches/year)	0.038	yr ⁻¹
k (precipitation plus recirculated leachate ^a >40 inches/year)	0.057	yr ⁻¹
DOC and k values—Modified bulk MSW option		
DOC (bulk MSW, excluding inerts and C&D waste)	0.31	Weight fraction, wet basis.
DOC (inerts, e.g., glass, plastics, metal, concrete)	0.00	Weight fraction, wet basis.
DOC (C&D waste)	0.08	Weight fraction, wet basis.
k (bulk MSW, excluding inerts and C&D waste)	0.02 to 0.057 ^b	yr ⁻¹
k (inerts, e.g., glass, plastics, metal, concrete)	0.00	yr ⁻¹
k (C&D waste)	0.02 to 0.04 ^b	yr ⁻¹
DOC and k values—Waste composition option		
DOC (food waste)	0.15	Weight fraction, wet basis.
DOC (garden)	0.2	Weight fraction, wet basis.
DOC (paper)	0.4	Weight fraction, wet basis.
DOC (wood and straw)	0.43	Weight fraction, wet basis.
DOC (textiles)	0.24	Weight fraction, wet basis.
DOC (diapers)	0.24	Weight fraction, wet basis.
DOC (sewage sludge)	0.05	Weight fraction, wet basis.
DOC (inerts, e.g., glass, plastics, metal, cement)	0.00	Weight fraction, wet basis.
k (food waste)	0.06 to 0.185 ^c	yr ⁻¹
k (garden)	0.05 to 0.10 ^c	yr ⁻¹
k (paper)	0.04 to 0.06 ^c	yr ⁻¹
k (wood and straw)	0.02 to 0.03 ^c	yr ⁻¹
k (textiles)	0.04 to 0.06 ^c	yr ⁻¹
k (diapers)	0.05 to 0.10 ^c	yr ⁻¹
k (sewage sludge)	0.06 to 0.185 ^c	yr ⁻¹
k (inerts e.g., glass, plastics, metal, concrete)	0.00	yr ⁻¹
Other parameters—All MSW landfills		
MCF	1.	
DOC _F	0.5.	
F	0.5.	
OX	0.1.	
DE	0.99.	

^aRecirculated leachate (in inches/year) is the total volume of leachate recirculated from company records or engineering estimates divided by the area of the portion of the landfill containing waste with appropriate unit conversions. Alternatively, landfills that use leachate recirculation can elect to use the k value of 0.057 rather than calculating the recirculated leachate rate.

^bUse the lesser value when precipitation plus recirculated leachate is less than 20 inches/year. Use the greater value when precipitation plus recirculated leachate is greater than 40 inches/year. Use the average of the range of values when precipitation plus recirculated leachate is 20 to 40 inches/year (inclusive). Alternatively, landfills that use leachate recirculation can elect to use the greater value rather than calculating the recirculated leachate rate.

^cUse the lesser value when the potential evapotranspiration rate exceeds the mean annual precipitation rate plus recirculated leachate. Use the greater value when the potential evapotranspiration rate does not exceed the mean annual precipitation rate plus recirculated leachate. Alternatively, landfills that use leachate recirculation can elect to use the greater value rather than assessing the potential evapotranspiration rate or recirculated leachate rate.

[75 FR 66473, Oct. 28, 2010]

TABLE HH-2 TO SUBPART HH OF PART 98—U.S. PER CAPITA WASTE DISPOSAL RATES

Year	Waste per capita ton/cap/yr	% to SWDS
1950	0.63	100
1951	0.63	100
1952	0.63	100
1953	0.63	100
1954	0.63	100
1955	0.63	100
1956	0.63	100
1957	0.63	100
1958	0.63	100
1959	0.63	100
1960	0.63	100
1961	0.64	100

Year	Waste per capita ton/cap/yr	% to SWDS
1962	0.64	100
1963	0.65	100
1964	0.65	100
1965	0.66	100
1966	0.66	100
1967	0.67	100
1968	0.68	100
1969	0.68	100
1970	0.69	100
1971	0.69	100
1972	0.70	100
1973	0.71	100
1974	0.71	100
1975	0.72	100
1976	0.73	100
1977	0.73	100
1978	0.74	100